

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (currently amended) An isolated biopolymer marker consisting of SEQ ID NO:4 which evidences a link to Type II diabetes.

Claims 2-38. (cancelled)

Insert
Claim ²39. (withdrawn-currently amended) A method for determining ^{in a patient sample} the presence of ~~an isolated~~ a biopolymer marker consisting of SEQ ID NO:4 ^{which is linked to Type II diabetes.} comprising:

(a) obtaining a sample from a patient;

(b) conducting mass spectrometric analysis on said sample in a manner effective to maximize analysis of peptide fragments contained therein and comparing mass spectrum profiles of said ~~isolated~~ biopolymer marker consisting of SEQ ID NO:4 to mass spectrum profiles of peptides obtained and analyzed from said sample; and

(c) confirming the presence of said ~~isolated~~ biopolymer marker consisting of SEQ ID NO:4 in said sample displaying a peak profile at about 1353 daltons in said mass spectrum profile:

wherein the presence of said ~~isolated~~ biopolymer marker consisting of SEQ ID NO:4 is indicative of a link to Type II diabetes.

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Claim ~~40~~². (withdrawn-currently amended) The method of claim ~~39~~², wherein [[the]] said sample is an unfractionated body fluid or a tissue sample.

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Claim ~~41~~². (withdrawn). The method of claim ~~39~~², wherein said sample is selected from the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

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Claim ~~42~~². (withdrawn). The method of claim ~~39~~², wherein said mass spectrometric analysis is selected from the group consisting of Surface Enhanced Laser Desorption Ionization (SELDI) mass spectrometry (MS), Maldi Qq TOF, MS/MS, TOF-TOF, ESI-Q-TOF and ION-TRAP.

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Claim ~~43~~³. (withdrawn). The method of claim ~~39~~³, wherein said patient is a human.

Claim ~~44~~⁷ (withdrawn-currently amended) A kit for determining the presence of ~~an isolated~~ a biopolymer marker consisting of SEQ ID NO:4 comprising: (a) a peptide consisting of SEQ ID NO:4, and (b) an antibody that binds to said peptide in a sample from a patient.

Claim ~~45~~⁸ (withdrawn). The kit of claim ~~44~~⁷, wherein said antibody is immobilized on a solid support.

Claim ~~46~~⁹ (withdrawn). The kit of claim ~~44~~⁷, wherein said antibody is labeled.